



# Analysis of Conditions and Trends

Lincoln Multi-Modal  
Transportation Study

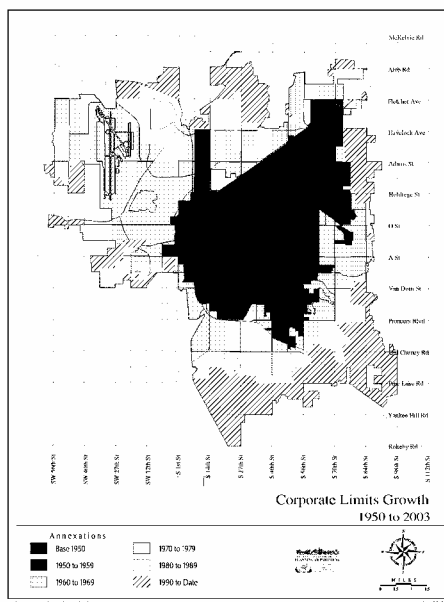


## Presentation Overview

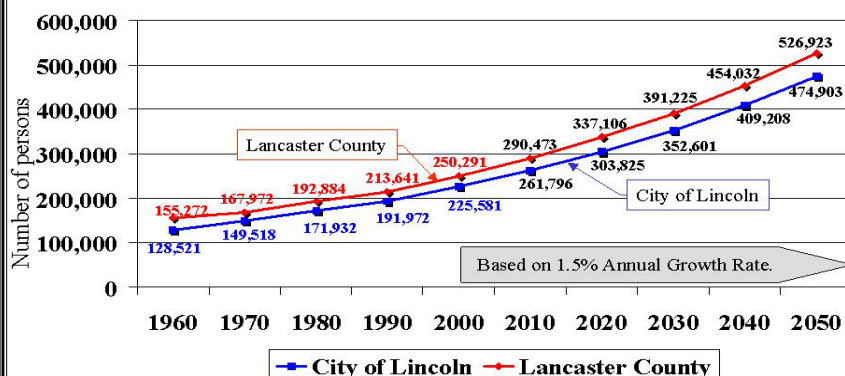
- Understanding Where you Are and from Where You Have Come Critical to Mapping a Future Course.
- Information Presented Tonight Intended to Establish Baseline Understanding.
- Many Elements Must Be Viewed in Combination as Part of a Multi-Modal Transportation Plan.

# Urban Growth

- Steady Urban Growth to South and East

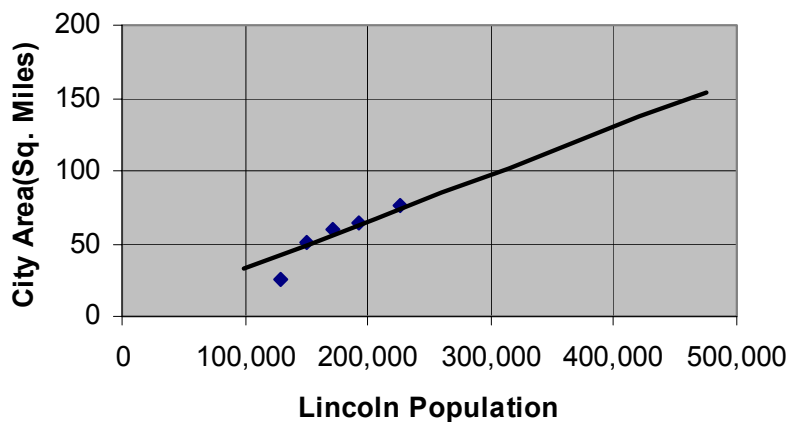


## City of Lincoln & Lancaster County: Population Change, 1960 - 2050



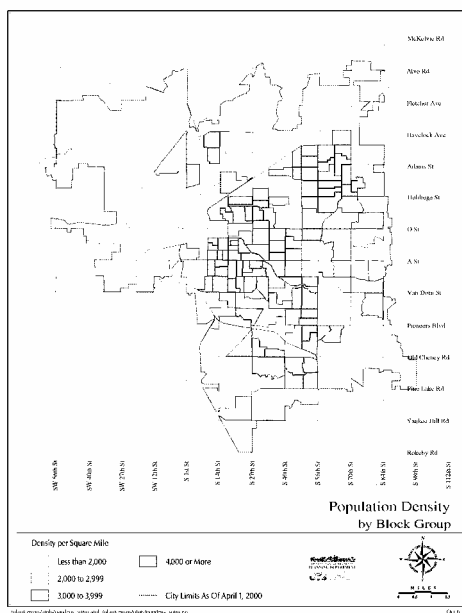
Source: U.S. Census / City of Lincoln

## City Land Area Expanding with Population

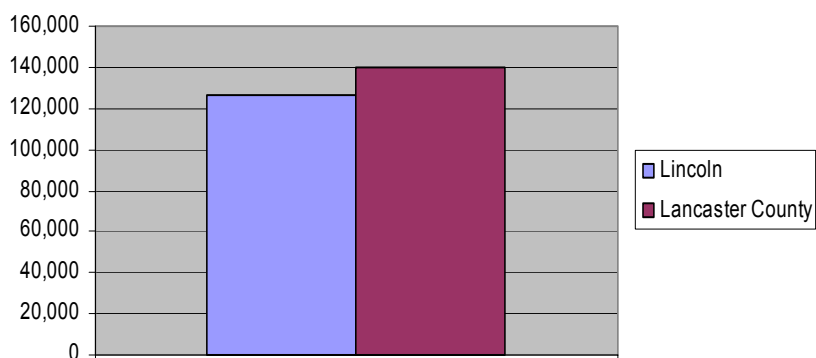


## Population Density

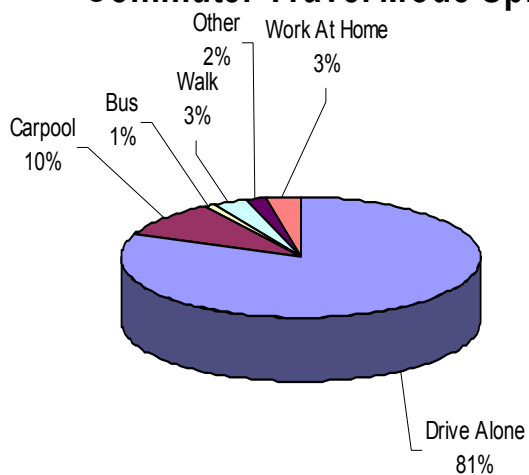
- High Density Core
- Low Density Edge



### Number of Persons Employed (2000)

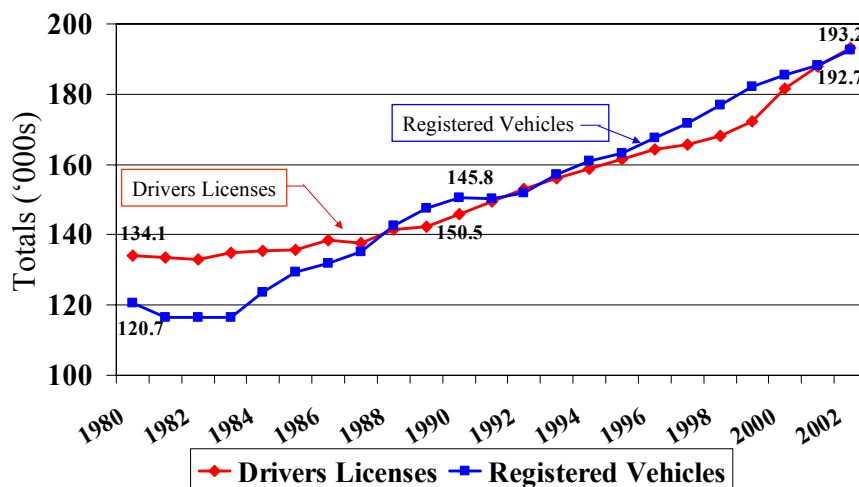


### Commuter Travel Mode Split

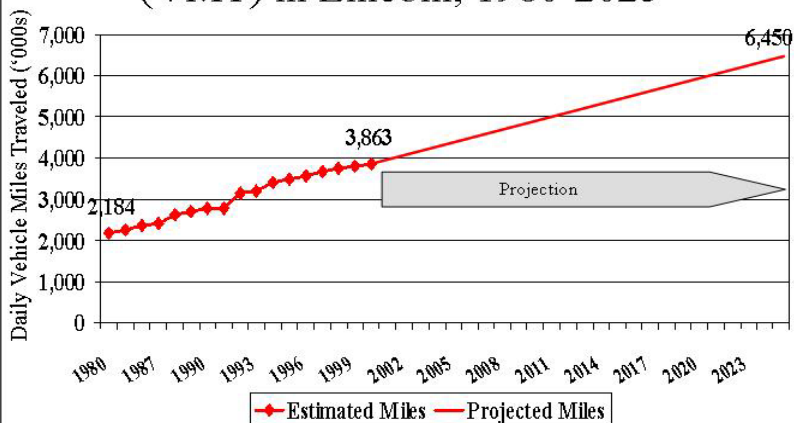


Source: Census 2000

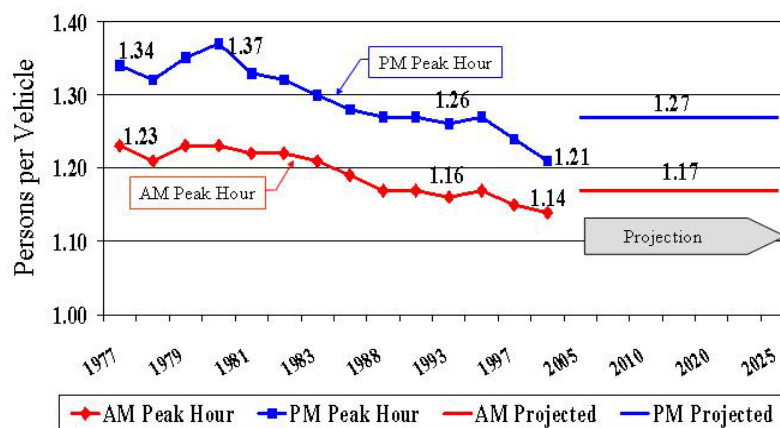
## Lancaster County: Number of Driver Licenses and Registered Vehicles, 1980-2002



## Estimated Daily Vehicle Miles Traveled (VMT) in Lincoln, 1980-2025

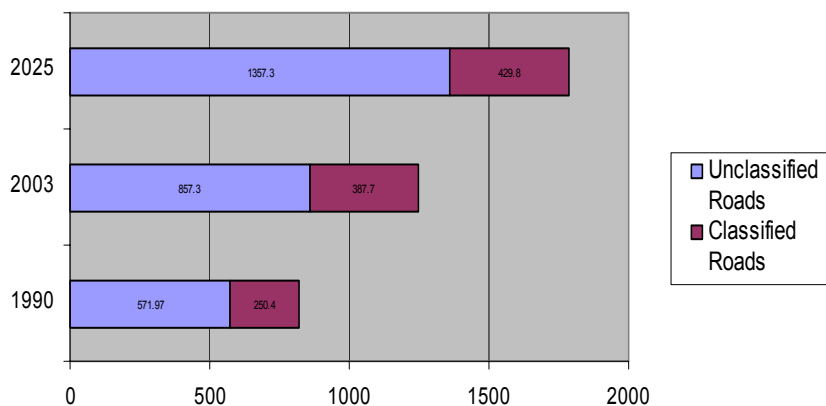


## Lincoln Peak Hour Average Auto Occupancy Rates, 1977-2025

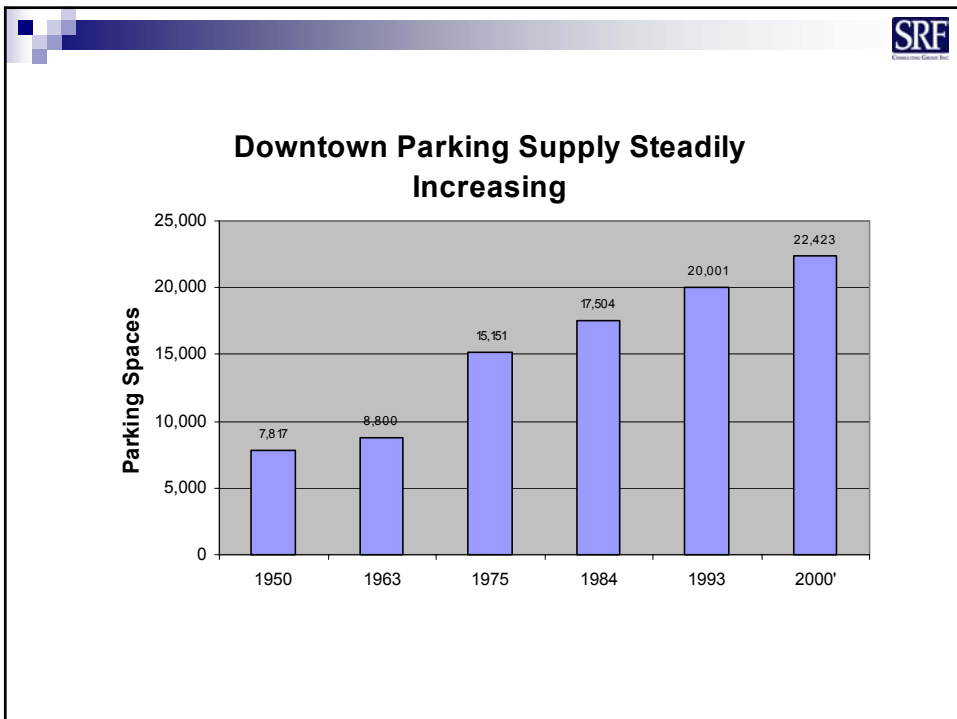
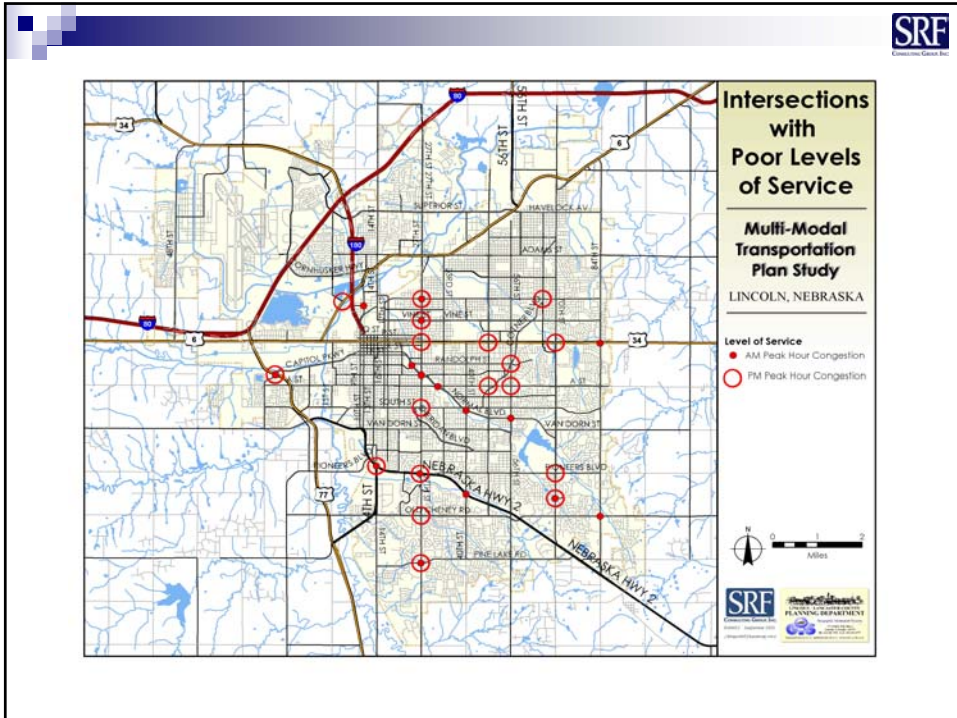


Source: City of Lincoln Public Works & Utilities Department

## Centerline Miles of Roadway (Lincoln)



Classified Roads: Freeways, Arterials, and Collectors  
Unclassified Roads: Local Streets



## Journey to Work

- 5.5% of Lancaster County Workforce Works Outside of County (almost 8,000).
- 3,500 Daily Work Trips from Lincoln to Omaha.
- 15,000 Workers Come into Lancaster County Daily
- 2,600 Daily Work Trips from Omaha to Lincoln.

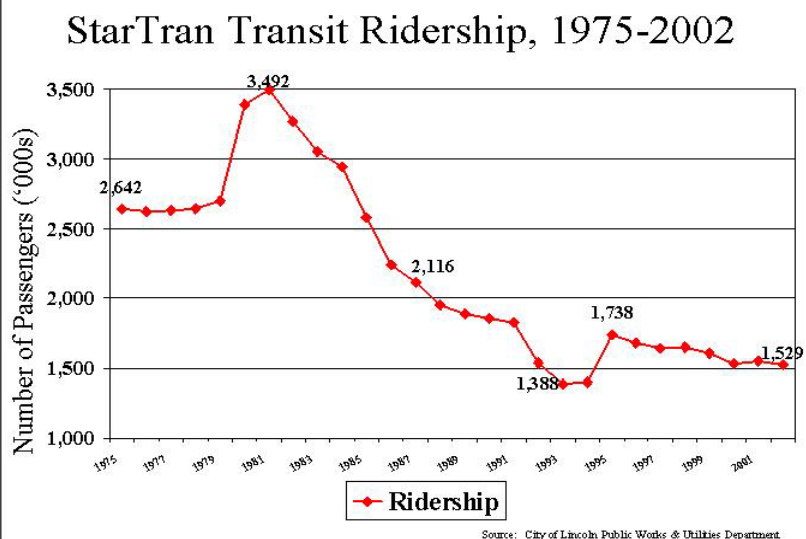
## Transit Overview

- 21 Fixed Routes and Demand Responsive
- 89% of Population w/in ¼ mile of transit
- 88% of Employees w/in ¼ mile of transit



## Transit Overview

- 56 Full-Size Coaches and 9 Vans
- \$7.3 Million Operating Expense
- 1.6 Million Passengers
- 18% Farebox Return
- Monday through Saturday Service



## Transit Use by Fare Category

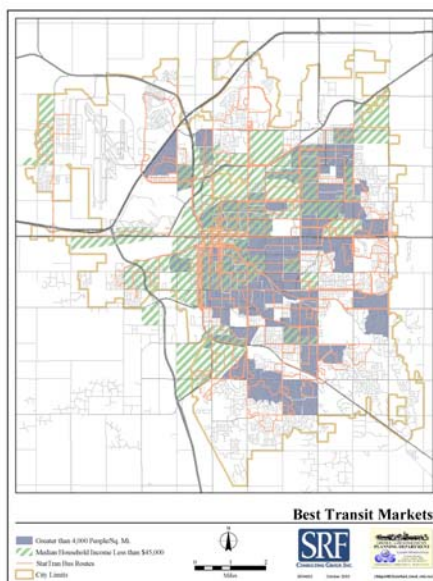
- University of Nebraska – Lincoln – 28%
- Lincoln Public Schools – 3%
- Elderly – 5%
- Cash/Tickets/Passes – 57%
- Transfers – 7%

## Transit Market Analysis

- Demographic and Socio-Economic Indicators Used to Identify Likely Riders.
- Core Markets Include Youth and Senior Populations, as Well as Low-Income.
- Core Transit Service Areas focus on High-Density Land Uses and/or Low-Income Concentrations.

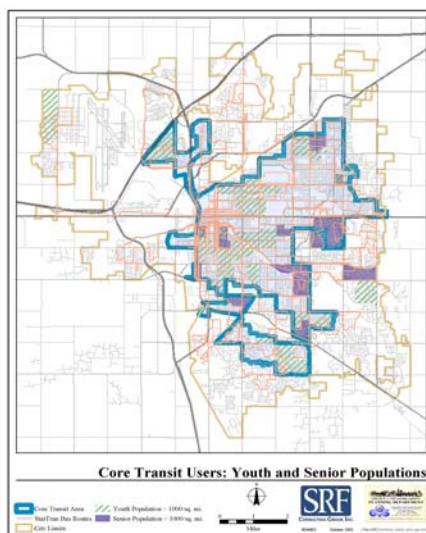
## Core Transit Service Area

- Key Indicators for Fixed-Route Transit Viability Include Density and Income.



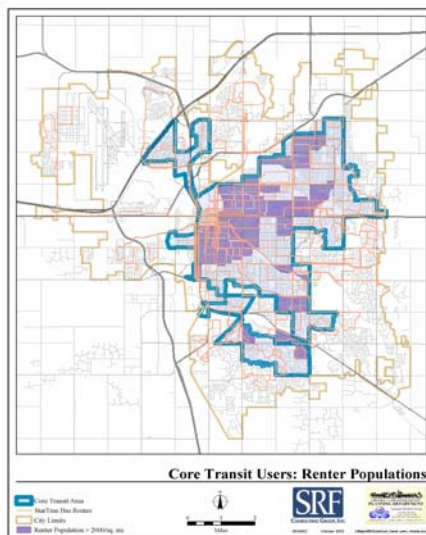
## Transit Markets

- Key Market Segments can be Identified as an Indicator of Transit Potential



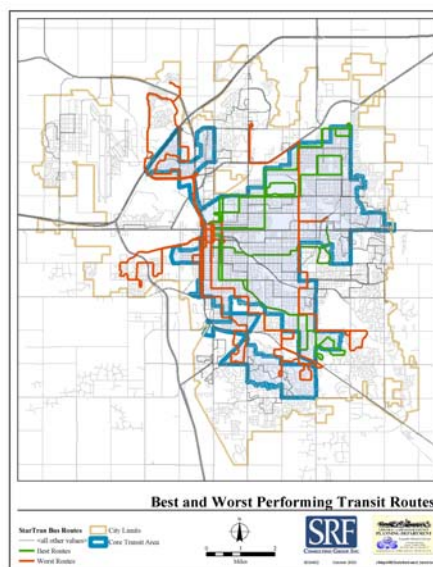
## Transit Markets

- Renters are Also Key Transit Market Segment



## Transit Performance

- Best Performing Routes match well with Identified Markets / Core Service Area



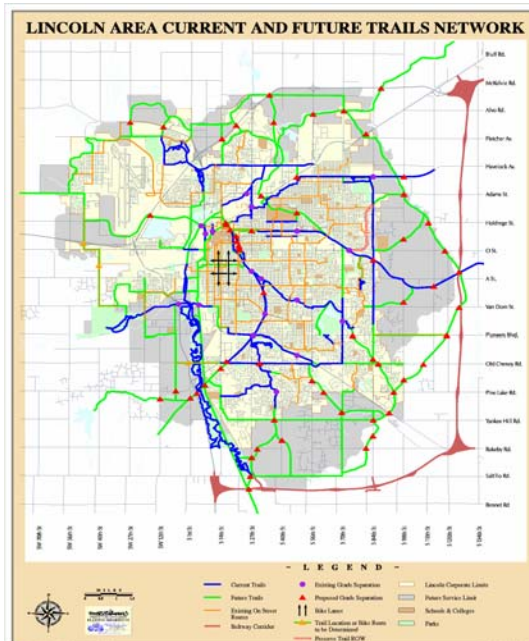
# Bicycling

## ■ Trail System is Very Strong

- 90+ miles
- Numerous Grade Separations
- Expansion plans

## ■ Trail System Weaknesses

- Highly radial
- Trails do not reach Downtown; key links soon to be completed
- Paths only 10 feet wide



## Bicycling

- No On-Street Striped Lanes
- Signed-Only Routes Not Very Helpful
- Lack of Collector Streets in New Neighborhoods Hinders Cross-Neighborhood Travel
- Arterial Streets Need Striped Lanes
- Summary: Trail Network Should be Complemented with Lanes and Collector Streets

## Walking

- Sidewalks on Both Sides of Nearly Every Street
- Interconnected Street System
- Long Distances to Most Destinations
- Trail System: Popular for Recreation; Paths too Narrow



## Peer Group Analysis

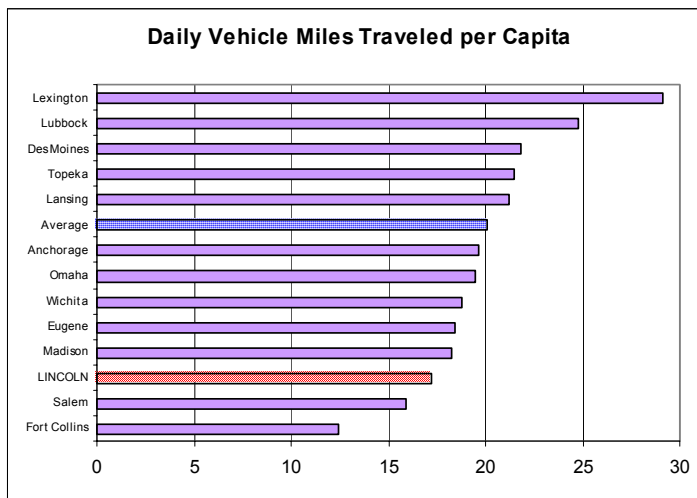
- A Peer Group is a Set of *Similar* Cities
- Criteria used to select cities
  - ☐ Population
  - ☐ Land area
  - ☐ Population density
  - ☐ State capitol
  - ☐ Major university
- Cities do not meet all criteria

## Lincoln Peer Cities

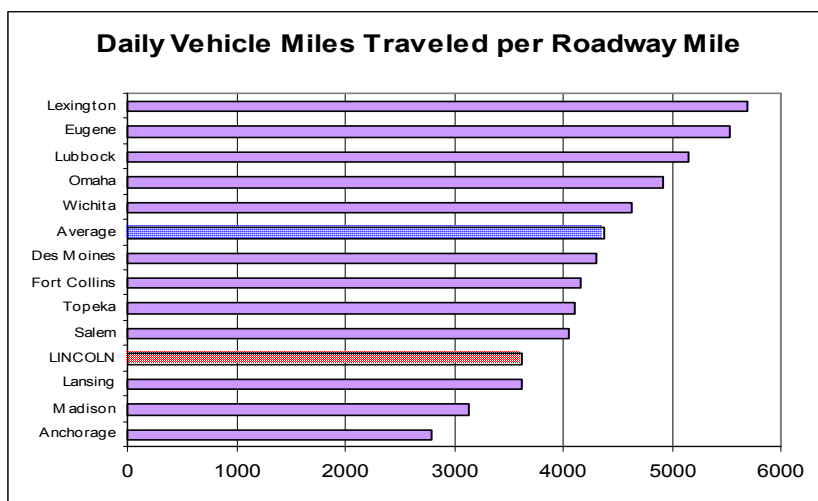
Urban Area	Urbanized Area Population	Land Area (Square Miles)	Population per Square Mile
Lexington	250,994	70	3,609
Eugene	224,049	69	3,271
Salem	207,229	69	2,994
Madison	329,533	114	2,893
Anchorage	225,744	79	2,863
Omaha	626,623	226	2,768
Lubbock	202,225	75	2,714
Des Moines	370,505	140	2,640
Fort Collins	206,757	84	2,472
Wichita	422,301	180	2,346
Lansing	300,032	137	2,192
Topeka	142,411	70	2,029
<i>Average</i>	292,367	109	2,733
Lincoln	226,582	78	2,901



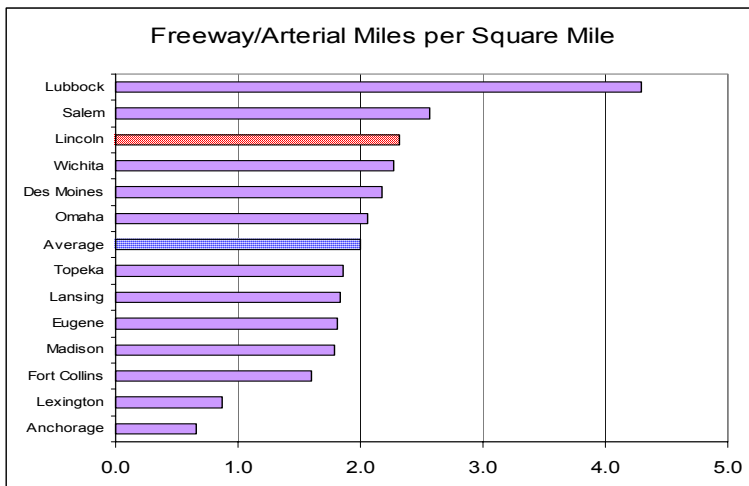
## Vehicle Travel per Capita is Low



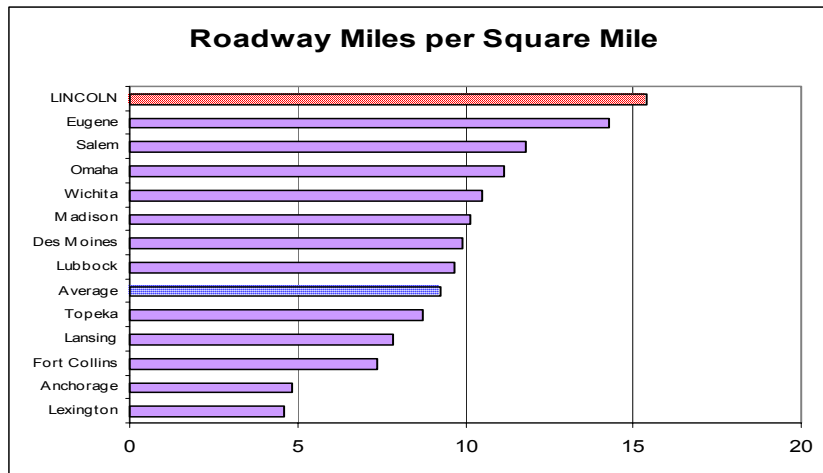
## Travel Low per Roadway Mile



## Higher Class Roads High in Region

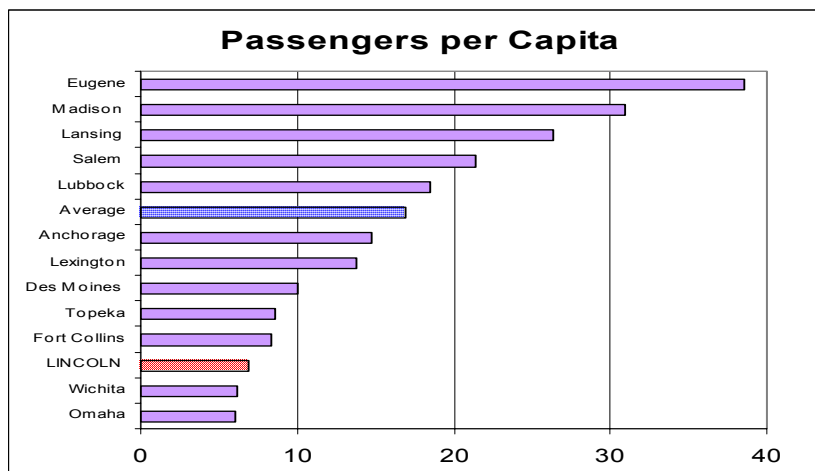


## Road Miles High per Square Mile

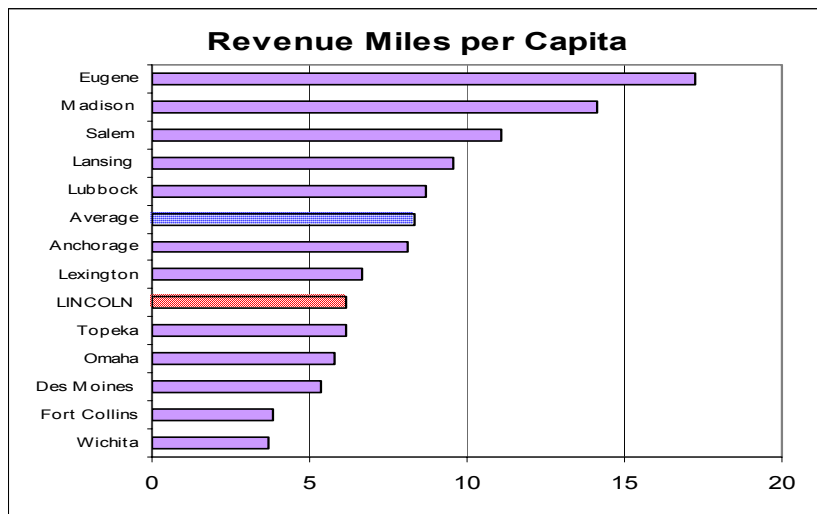


Source: State Transportation Profiles, US Department of Transportation, Bureau of Transportation Statistics, 2002

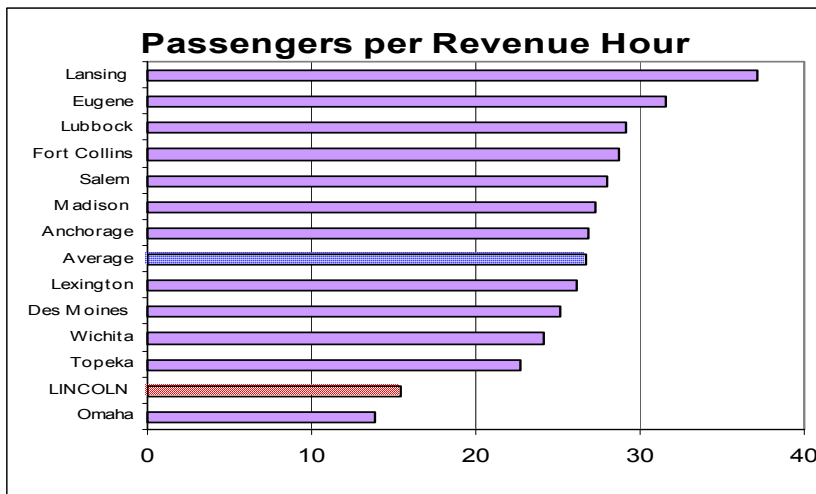
## Bus Ridership is Low per Capita



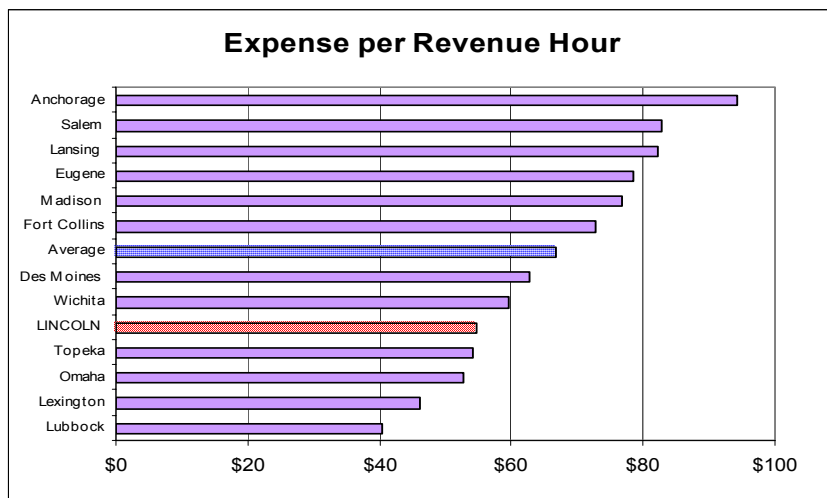
## Bus Service Provided is Low per Capita



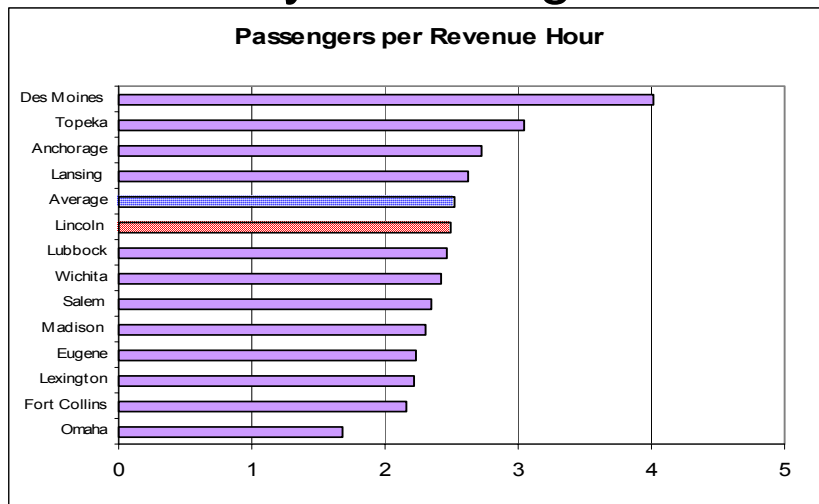
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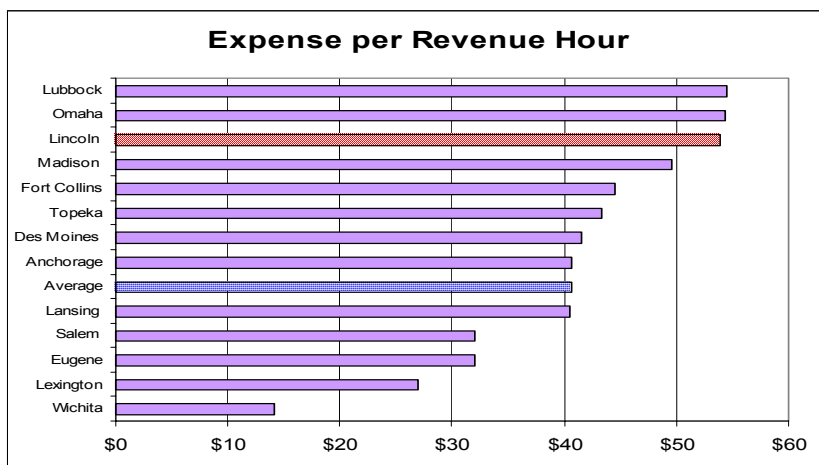
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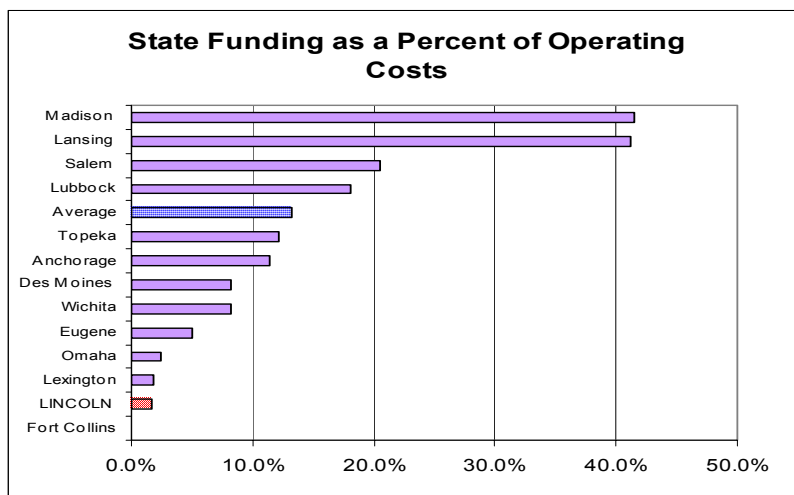
## Demand Response Passenger Productivity is Average



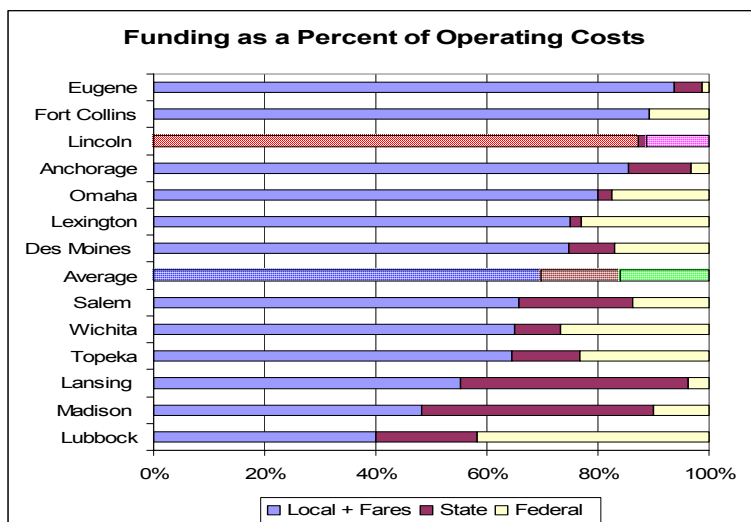
## Demand Response Operating Cost is High



## State Funding is Low



## Local Contribution is High



## The Lincoln Comprehensive Plan

- Market Response: Few Projects Supportive of Alternative Transportation Policies
- Trend: Recent Patterns Continue to the Beltway and Beyond; Density Decreasing; Reinforce Auto Dependence
- Nodes Needed
- Opportunities Created by Growth
  - Dense, walkable commercial and residential nodes

## Long-Range Transportation Plan

- Multi-Modal: Emphasizes Balancing Auto Travel with Transit, Bicycling and Walking
- Walking Connections to the Bus Stops
- Transit-Supportive Development
- More Development in “Centers” and “Districts”
- East and South Beltway Planned
- Antelope Valley Project

## Population and Area Summary

- City Adding 30+ Square Miles for Every 100,000 Population;
- By 2050, City Will be 150 Square Miles and 475,000 Population; and,
- Total County Population will be 525,000.

## Auto Travel Summary

- Drive Alone is Overwhelming Choice for Commuters;
- Auto Travel has Grown at a Tremendous Pace in Lincoln Over Past 20 Years;
- Modest Levels of Traffic Congestion;
- Roadways Expected to Increase to Accommodate Growth; and,
- City Appears Committed to Providing Parking as Needed.



## Transit Travel Summary

- Coverage of Lincoln Land Area is Very High;
- Service Frequency and Hours of Operation is Limited; and,
- Dependence on Local Funds is Quite High.

## Pedestrian/Biking Travel Summary

- Very Strong Trail System;
- Trail System Primarily Radial; and,
- Trail System Primarily Seen as Recreational with Poor Downtown Connection.

## Land Use and Planning Connection

- Street Pattern Changed Significantly in the 1970s, Which Limits Opportunities for Trails and Transit;
- Few Dense Nodes to Support Transit;
- Comprehensive Plan has Good Policies for a Base, but Market Has not Been Very Supportive; and,
- Antelope Valley Project Opportunity to Shape Future Growth.

## Next Considerations

- Now That we Know Where You've Come From, we Have to Figure Out Where you Want to Go.
- Use the Baseline to Develop Alternative Future Scenarios.
- Evaluate the Steps Needed to Attain Future Vision.